

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

|  |   |   |                  |
|--|---|---|------------------|
| Applicant's or agent's file reference<br>36004   | <b>FOR FURTHER ACTION</b>   |   | See item 4 below |
| International application No.<br>PCT/IT2005/000196   | International filing date ( <i>day/month/year</i> )<br>07 April 2005 (07.04.2005) | Priority date ( <i>day/month/year</i> )<br>07 April 2004 (07.04.2004) |                  |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |   |   |                  |
| Applicant<br><b>SOULIMANI, Atika</b>   |   |   |                  |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 10 sheets, including this cover sheet.
- In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.
3. This report contains indications relating to the following items:
- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input checked="" type="checkbox"/> | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input checked="" type="checkbox"/> | Box No. VII  | Certain defects in the international application  |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application   |
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

|   |  |
|---|--|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland | Date of issuance of this report<br>11 October 2006 (11.10.2006)          |
| Facsimile No. +41 22 338 82 70  | Authorized officer<br><br><b>Simin Baharlou</b><br>e-mail: pt09@wipo.int |

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

REC'D 26 AUG 2005

WPA CT POT

To:

see form PCT/ISA/220

20/10

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Applicant's or agent's file reference  
see form PCT/ISA/220

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

International application No.  
PCT/IT2005/000196

International filing date (day/month/year)  
07.04.2005

Priority date (day/month/year)  
07.04.2004

International Patent Classification (IPC) or both national classification and IPC  
A61K7/06, A61P17/14

Applicant  
ATIKA, Soulimani

### FOR FURTHER ACTION See paragraph 2 below

1. This opinion contains indications relating to the following items:
  - Box No. I Basis of the opinion
  - Box No. II Priority
  - Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - Box No. IV Lack of unity of invention
  - Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - Box No. VI Certain documents cited
  - Box No. VII Certain defects in the International application
  - Box No. VIII Certain observations on the International application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

#### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IT2005/000196

**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - in written format
    - in computer readable form
  - c. time of filing/furnishing:
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application,

claims Nos. 14-16,

because:

the said international application, or the said claims Nos. 14-16, with respect to industrial applicability relate to the following subject matter which does not require an international preliminary examination (specify):

**see separate sheet**

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (specify):

the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

no international search report has been established for the whole application or for said claims Nos.

the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

has not been furnished

does not comply with the standard

the computer readable form

has not been furnished

does not comply with the standard

the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

See separate sheet for further details

**WRITTEN OPINION OF THE  
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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

|                               |             |      |
|-------------------------------|-------------|------|
| Novelty (N)                   | Yes: Claims | 1-16 |
|                               | No: Claims  |      |
| Inventive step (IS)           | Yes: Claims |      |
|                               | No: Claims  | 1-16 |
| Industrial applicability (IA) | Yes: Claims | 1-13 |
|                               | No: Claims  |      |

**2. Citations and explanations**

**see separate sheet**

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

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**Re Item III**

**Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. Claims 14-16 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT, insofar as the condition of the scalp or animal skin which is to be treated may be a pathological condition (cf. the description, p. 1, l. 13). Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(I) PCT).

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement**

2. For the assessment of the present claims 14-16 on the question whether they are industrially applicable, no unified criteria exist in the PCT Contracting States. Patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.
3. Reference is made to the following documents:
  - D1: FR-A-1 481 008
  - D2: GB-A-2 289 219
  - D3: DE-A-33 32 055
  - D4: US-A-5 674 510
  - D5: DE-A-41 38 680
  - D6: DE-A-35 33 121
  - D7: PATENT ABSTRACTS OF JAPAN vol. 2000, no. 12, (03.01.2001)  
-& JP-A-2000 256 144
  - D8: WO-A-96 10387
  - D9: FR-A-2 573 651
  - D10: DATABASE CA [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US;  
(24.05.1999), retrieved from STN Database accession no. 1999:316952

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XP002340834 -& JP-A-11 130 634

D11: GB-A-1 001 681

D12: FR-A-2 551 972

D13: FR-A-956 840

D14: US-A-1 350 843

D15: FR-A-2 416 010

D16: US-A-2001 018 060

D17: GB-A-2 305 123

D18: EP-A-0 018 199

D19: JADHAV, VISHAL A. ET AL: "Antidandruff herbal cosmeceuticals: A novel approach" COSMETICS & TOILETRIES, 116(12), 77-78,80,82; ISSN: 0361-4387, 2001, XP009052383

4. With regard to the interpretation of the present claims, the following observations are made:
  - 4.1 The term "manufactures" or "manufacture", as used in the present claims, is understood, in the light of the description, to mean parts of plants which may be in mashed, fermented, dried and/or pulverized form, or any kind of extract thereof (cf. the description, p. 3, ll. 68 - p. 4, l. 1; p. 5, ll. 98-102; p. 7: ex. 1).
  - 4.2 The term "deutoplasm" is understood to signify "egg yolk".
5. The subject-matter as defined in the present claims is novel in the sense of Article 33(2) PCT, because the prior art does not describe any compositions containing a combination of all of the five mandatory ingredients as required according to present independent claims 1, 11, 12, 14, viz.:
  - 1) *Nicotiana tabacum* leaves or extracts thereof,
  - 2) entire plants of *Lavandula officinalis* or extracts thereof,
  - 3) *Allium* bulbs or extracts thereof,
  - 4) sweet almond oil (*Prunus amygdalus dulcis* oil) and
  - 5) egg yolk.
6. The present application does not meet the criteria of Article 33(1) PCT, because the

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subject-matter of claims 1-16 does not involve an inventive step in the sense of Article 33(3) PCT, for the following reasons:

- 6.1 The underlying technical problem was to provide a composition which is suitable for topical treatment of the scalp and hair or of animal skin, and which provides both anti-dandruff activity and hair-loss preventing and/or hair-growth promoting activity.
- 6.2 The desired technical effect is provided by the combination of five mandatory ingredients as listed above (cf. par. 5 supra).
- 6.3 However, it was already known that these ingredients provide anti-dandruff activity, hair-loss preventing and/or hair-growth promoting activity:
  - 6.3.1 The juice or crushed bulbs of *Allium* plants have been used as active agent in compositions for the prevention of hair loss or the stimulation of hair growth (D1: cl. 1, par. 1-2; D2: cl. 1, 6, 7, 10, 12-15; D3: cl. 1-2, 6; D4: claims, col. 3 / II. 17-30; D5: claims, ex. 1, col. 1 / II. 10-19; D6: cl. 1, p. 2 / II. 16-38; D7: abstract, cl. 1, par. [0005], [0008]-[0010]; D8: cl. 1-2, examples; D15: cl. 1, p. 1 / II. 1-34).
  - 6.3.2 The use of tobacco in compositions for removing dandruff, inhibiting hair loss or stimulating hair growth is also known (D14: col. 1 / II. 9-29), i.a. in combination with garlic (D15: cl. 1; p. 1 / II. 1-34).
  - 6.3.3 Furthermore, lavender has been used as an active agent in composition for combating dandruff and hair loss (D11: claims, example; D12: cl. 1, p. 1 / II. 11-26; D13: claim and description; D19: p. 77, table 1). The use of the essential oil of lavender in such compositions is also known (D9: p. 6 / I. 26; p. 2 / II. 24-33).
  - 6.3.4 Sweet almond oil is a vegetable oil which is well known as a cosmetic base. It has furthermore been employed in formulations for promoting hair growth and/or minimising hair loss (D17: cl. 6; ex. 2-3; D18: cl. 1-2; p. 2 / par. 14, examples, p. 6. Sweet almond oil is also known to have antidandruff activity (D16: cl. 1, 3, 11, par. [0019], [0027]).
  - 6.3.5 Egg yolk is frequently used in compositions for promoting hair growth (D1: cl. 1, par. 1-2; D2: claims; D10: abstract; par. [0029]; D13: claim, description) and is also known to provide anti-dandruff activity (D9: p. 2, II. 20-23).
- 6.4 In the light of the cited prior art disclosures, it is therefore not surprising that the

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composition as claimed should provide the desired combination of anti-dandruff and anti-baldness activity on the scalp or animal skin.

- 6.5 The application does not contain any evidence of an unexpected technical effect going beyond the expected addition effect of the known properties of the five mandatory ingredients.

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**Re Item VII**

**Certain defects in the International application**

7. The following deficiencies should also receive attention:
  - 7.1 The meaning of the term "for exception", employed in independent claim 11, is obscure.
  - 7.2 The back-references to claims 8 and 10 in dependent claims 13, 15 and 16 appear to be erroneous.
  - 7.3 It would appear that "aviary" as used in claim 1 should in fact read "avian".